

5258596



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5762-9

Job Sheet 207385



Part No: D5762-9

Job Qty: 40 pcs

Part Name: Guide



Part Weight: 0 lbs

Status: New

Job Created: 2/25/20

Job Tracking No:

Due Date: 3/6/20

Created By: Jennifer Renwick

Type: Stock

Description:

Note: URF 2020-525 Was PN: 78633-03 DWG D5762 REV:A IPP REV:A 19.12.20 NEW ISSUE JV VERF:DD

Ship Via:

EFFECTIVE _____ AUTH _____

RELEASED _____ DATE _____
Priority: Medium

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1	40 pcs	3/6/20	3/6/20	0.17	1.33	Waterjet - Flow		dc 20/02/20
110	QC 2	40 pcs	3/6/20	3/6/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		dc 20/02/20
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		
							QC 2 - 65		

Plex 2/25/20 12:34 PM Dart.lajeunesse.marie

120 QC 8	40 pcs	3/6/20	0.00 0.00	QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
130 Packaging 3-1 - Stock - B4B	40 pcs	3/6/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	

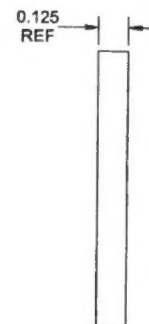
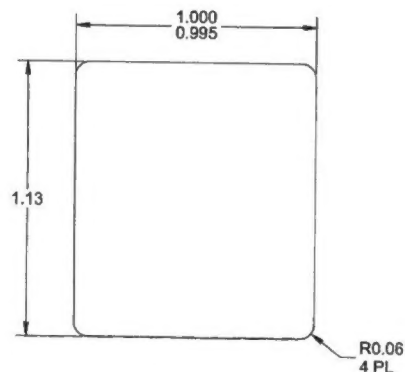
DAS
40
9-88

FEB 26 2020

MFL

				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
140 QC 21 - SA	40 pcs	3/6/20	0.00 0.00	QC 21 - SA - 21	DMS
				QC 21 - SA - 70	21
				QC 21 - SA - 53	53
Part Op 100 - 1-Cut as per D5762 DWG. DWG. Rev: <u>A</u> PROG. Rev: <u>A</u> 2-Deburr if necessary Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB 120 - QC8- Inspect parts - second check 130 - Identify as per dwg & Stock Location: _____ 140 - QC21- Final Inspection - Work Order Release					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
M304S11GA	304/316 0.125 Sheet	.3200 sf (.008 ea)	100-Waterjet - Flow - 1	5242860	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Waterjet - Flow - 1	M304S11GA	0	145	0	
Part Specifications					
Specifications could not be found.					

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D5762-9 GUIDE
(DERIVED FROM AERO DESIGN P/N 78633-03)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 207385 MWS
2002-28

- NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR OR PLATE, 1/8 THICK
PER ASTM A276 OR ASTM A240
REF DART SPEC M304B
OR
AISI 304/316 STAINLESS STEEL SHEET ANNEALED, #11 GA (0.125 THICK)
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S11GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.04 lbs

UNDER REVIEW
URF 2020-524 20.02.20 (NO)

RELEASED
2020 FEB 19

DESIGN	ZF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	DD	D5762	SHEET 10 OF 14
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	AFT BEAM	NTS
DATE	19.12.17	COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB045332**



Supplier: ACI001-VF
Acier Oue' lte Inc.
935 Boul. u Havre
Valleyfie
QC
J6S 5L e ada
Phone :00 567 4248
Fax: 450 377 5696

Attention: Langevin, Melanie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045332

PO Date: 12/6/19

Due Date: 12/13/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments: quote no. sou0227540

DEC 9 8 2019

Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M2024T3S.040			2024-T3 .040 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209	Firmed -		12/13/19	144 sf	0 sf	144 sf	\$6.9811666/sf	\$1,005.29
									144 sf CLB			DAS 82 9-89	
												DEC 1 9 2019	
2		M6061T6S.188			6061-T6 .188 Sheet : MATERIAL: 6061- T6/T62 ALUMINUM SHEET AS PER QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed -		12/13/19	48 sf	0 sf	48 sf	\$12.77916650/sf	\$613.40
									48 sf CLB			DAS 82 9-89	
												DEC 1 9 2019	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB045332



Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3		M6061T6S.080			6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed		12/13/19	192 sf	0 sf	192 sf	\$6.2664583/sf	\$1,203.16
4		M304S11GA			304/316 0.125 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed -		12/13/19	96 sf	0 sf	96 sf	\$13.329062/sf	\$1,279.59
5		M304S14GA			304SS sheet .080 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed -		12/13/19	64 sf	0 sf	64 sf	\$8.366652630/sf	\$535.47

Handwritten: 142 SF

Stamp: DAS 82 9-89
DEC 19 2019

Handwritten: 96sf 66B

Stamp: DAS 82 9-89
DEC 19 2019

Handwritten: 64 SF 66B

Stamp: DAS 82 9-89
DEC 19 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB045332**



Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6		M304S16GA	D3494		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed -		12/13/19	128 sf	0 sf	128 sf	\$6.5061562/sf	\$832.79
										128 sf OK CWS		DEC 19 2019 DAS 82 9-89	
7		M304S18GA			304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed -		12/13/19	320 sf	0 sf	320 sf	\$5.7099375/sf	\$1,827.18
										320 sf OK CWS		DEC 19 2019 DAS 82 9-89	

Grand Total: \$7,296.87

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/6/19 11:14 AM Dart.Lavoie.Chantal



ACIER OUELLETTE INC.

935, Boul. du Havre
 Salaberry de Valleyfield (Québec) J6S 5L1
 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - **MILL TEST**

Copy

CO00183417

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
 HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
 HAWKESBURY, Ontario, K6A 1K7

Att :

Delivery Route 5

Customer N°

Date

Delivery date

Your order N°

Processed by

Salesman

Carrier

Credit Terme

CLI0001056

2019/12/06

2019/12/13

POHB045332

Josianne Bourdon

JOSIANNE BOURDON

OUELLETTE VALLEYFIELD

Net 30 Days

Instruction F-M

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ALU SHEET .040 (18G) 2024-T3 48 (4 X 12) DART FEALD-04041220248 12473 AC32236-SA-11/12 Lot 338988B9 Heat: 131	81.07	144.00	PI2_\$CLB								
2 ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 AC32233-TH-11/12 Lot 16135101 H: 01/0091979/8	128.88	48.00	PI2_\$CLB								
3 ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 TRANSFERT ST-JEROME LE 11-12 PACKAGING Lot: 400871 H: H3600021	164.30	144.00	PI2_\$CLB								
4 SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 PACKAGING Heat: C84X	504.00	96.00	PI2_\$CLB								
5 SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 PACKAGING Heat: LZ25HC10	209.98	64.00	PI2_\$CLB								
6 SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 PACKAGING Heat: 4167	336.00	128.00	PI2_\$CLB								
7 SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425 PACKAGING Heat: C44B	672.00	320.00	PI2_\$CLB								



Invoice

FC00190611

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Sold to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7
Att : Facturation

Customer N° CLI0001056
Date 2019.12.16
Your order N° POHB045332
Salesman JOSIANNE
Carrier OUELLETTE VALLEYFIELD
Credit Term Net 30 Days
Order N° CO00183417

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amount
ALU SHEET .040 (18G) 2024-T3 48 (4 X 12) DART FEALD-0404122024B 12473 3 X 4' X 12' POHB045332 LINE 1 LOT 338988B9 CAST 131 AC32236-SA-11/12	81.07	144.00	PI2_\$CLB	3.00	UN		3.0	335.0967	1 005.29
ALU SHEET 3/16 6061-T6 (4 X 12) FEAL-3164126061 4269 1 X 4' X 12' POHB04532 LINE 2 LOT 16135/01 HEAT 01/0091979/8 AC32233-TM-11/12	128.88	48.00	PI2_\$CLB	1.00	UN		1.0	613.4000	613.40
ALU SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 3195 3 X 4' X 12' POHB045332 LINE 3 LOT 400871 HEAT H3600021 TRANSFERT ST-JEROME LE 11-12 PACKAGING	164.30	144.00	PI2_\$CLB	3.00	UN		4.0	228.0925	912.37
SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 3 X 4' X 8' POHB045332 LINE 4 HEAT C84X PACKAGING	504.00	96.00	PI2_\$CLB	3.00	UN		3.0	426.5300	1 279.59
SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 2 X 4' X 8' POHB045332 LINE 5 HEAT LZ25HC10 PACKAGING	209.98	64.00	PI2_\$CLB	2.00	UN		2.0	267.7300	535.46
SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 4 X 4' X 8' POHB045332 LINE 6 HEAT 4167 PACKAGING	336.00	128.00	PI2_\$CLB	4.00	UN		4.0	208.1975	832.79
SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425	672.00	320.00	PI2_\$CLB	10.00	UN		10.0	182.7180	1 827.18

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DEC 20 2019



Invoice

FC00190611

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amount
10 X 4' X 8' POHB045332 - LINE 7 HEAT: C44B PACKAGING	0.00	1.00	UN	1.00	UN				
FUEL CHARGE FRAIS_ENERGETIQUE	0.00		\$						3.95

Note : ATTENTION: MILL TEST REQUIS*Chaque item identifier avec :*

- Le # PO client
- Le # d'item
- Le heat #
- Emballer les pièces dans carton

Conditions : Total Weight (Lbs) : 2 096.24

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Subtotal	7 010.03
TPS/GST : 822 670 774 RT0001	
TVQ/QST : 122 127 8182 TQ0001	
HST	911.30
Total (\$CAD)	7 921.33
Solde (\$CAD)	7 921.33

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S 11GA
 DATE: DEC 20 2019

PO / BATCH NO.: POMB045332
S242860

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 96 SF
 QUANTITY INSPECTED: 96 SF
 QUANTITY REJECTED: —

THICKNESS ORDERED: .125
 THICKNESS RECEIVED: .125
 SHEET SIZE ORDERED: 4'x8'
 SHEET SIZE RECEIVED: 4'x8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A240
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	KIT CB-X
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>12</u> <u>3-89</u>	SIGNED OFF BY: _____		
DATE: <u>DEC 20 2019</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LIME 4

M304S11GA

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET
ANNEALED

SPECIFICATION: MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

FINISH:

FINISH	DART M-NUMBER IDENTIFIER
UNPOLISHED No. 1	1P
UNPOLISHED No. 2D	2D
UNPOLISHED No. 2B	NONE
POLISHED No. 3	3P
POLISHED No. 4	4P
BUFFED No. 6	6P
BUFFED No. 7	7P
BUFFED No. 8	8P

PART NUMBER: M304S TT GA #P
GA

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.099
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.140 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

DAS
82
S-89

DEC 2 0 2019

RELEASED

2015 FEB 04

ECN 15-522 47

REV.	DESCRIPTION	BY	DATE
D	ADDED GAUGES D 7.	AJS	15.01.06
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PN WITH FINISH OTHER THAN 2B (ZN B5)	MB	12.09.20
B	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 06-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		M304S	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		304/316 SS SHEET	NTS
DATE	15.01.06	COPYRIGHT © 2001 BY DART AEROSPACE LTD NO DISSEMINATION OF THIS DRAWING OR ANY PART THEREOF TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION OF DART AEROSPACE LTD.	

(J)

3402

FESS-11G483042B
S11304L



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

29638
70546
54988
6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 526418 1
Customer: 007050 001

Date: 7/25/2019 Page: 1
Steel: 304/304L
Finish: 2B

Your Order: 70546

NAS Order: WN 0111468 02

Corrosion: ASTM A262/15A; 180Bend-OK

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED. UNS 30400/30403
ASTM A240/18, A480/18a, A566/15, ASME SA240/17, SA480/17, SA566/17
CHEM ONLY ON FOLLOWING ASTM: A276/17, A479/17, A484/16, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J XMRK; MIL-5059D AMD3(X CRN MEAS); MIL-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; QQS766D-A X MAG PERM
MTN SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DFARS Compliant

DAS
82 DEC 20 2019
9-89

Product Id	Coil #	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
05C84X AA	05C84X A		.1200	48.0000	4,442	SHEETS 144.00		19	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# 12323
Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
C84X	US	.0232	18.1450	.4395	1.8185	.3810	.0826	8.0750	.0320	.0033
SI %										
.2745										

MECHANICAL PROPERTIES

Product Id#	1 d o i c =	UTS KSI	20C .2% YS KSI	20C ELONG %-2"	% Hard RB	Tail Hard
05C84X AA	F T	93.43	44.50	48.77	85.00	85.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS TARK

7/25/2019

Heat: C84X

209099

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div>			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause <div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		FAULT CATEGORY <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>			
Other/Details:					